

1 RECORD OF ORAL HEARING

2

3 UNITED STATES PATENT AND TRADEMARK OFFICE

4

5

6 BEFORE THE BOARD OF PATENT APPEALS

7 AND INTERFERENCES

8

9

10 Ex parte GEORGE HRADIL

11

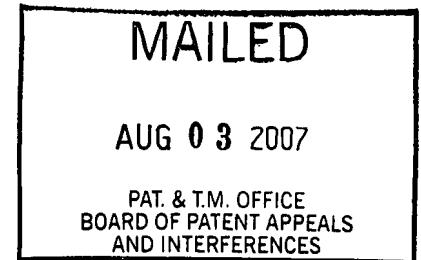
12

13 Appeal 2007-1209

14 Application 10/763,979

15 Technology Center 1700

16



17

18 Oral Hearing Held: July 10, 2007

19

20

21

22 Before EDWARD C. KIMLIN, BRADLEY R. GARRIS, and

23 JEFFREY T. SMITH,

24 Administrative Patent Judges

25

26

27 ON BEHALF OF THE APPELLANT:

28

29 ALLAN FANUCCI

30

31

32

33

34

35

36

37

38

39

1 The above-entitled matter came on for hearing on Tuesday, July
2 10, 2007, commencing at 1:01 p.m. at the U.S. Patent and Trademark Office,
3 600 Dulany Street, 9th Floor, Alexandria, Virginia.

4 JUDGE KIMLIN: Good afternoon, Mr. Fanucci.

5 MR. FANUCCI: Good afternoon. Thank you.

6 May it please the board, I'm here to argue for the patentability
7 of the claims of Dr. Hradil's patent application, the serial number of which is
8 763979 in the 10 series.

9 JUDGE KIMLIN: You may begin when you're ready.

10 MR. FANUCCI: Okay. Thank you.

11 I think what we have here is we have an invention where our
12 client has found a couple of parameters that, when you combine them
13 together, give you some unexpected results with respect to electroplating of
14 certain metal parts. These parts, as you probably know from the trends in
15 the industry, the electronics industry now has a lot of parts that are part
16 ceramic or part plastic or glass and part metal, and they require plating so
17 that they can receive leads or other electronic connections, and in the
18 processing of these parts, they keep getting smaller and smaller. They
19 present bigger and bigger problems in trying to get a nice uniform coating
20 down on the metal parts without kind of wrecking the plastic or the glass or
21 ceramic parts.

1 So, what we've found is that, when you have a certain solution
2 that includes this ascorbic acid type of compound -- we have it defined by
3 structure and also by its general chemical formula -- using that in
4 combination with a controlled pH, and also with a specific metal
5 concentration ratio, we've found that what you can have is parts that come
6 out to be plated fairly uniformly, because we're avoiding problems during
7 the electroplating process such as the agglomeration of parts, and some of
8 these components are very, very tiny.

9 They tend to stick together when they're drawn into an
10 electroplating solution if you don't have the right parameters set for that, and
11 so, what we have here is a claim directed to a method of electroplating these
12 parts and their composite substrates, which have the electroplatable and
13 non-electroplatable portions, and we've gone through trying to define the
14 claim properly by reciting the pH range that -- and the combination of this
15 concentration ratio of the complexing agent to the metal ion concentration,
16 which allows us to get the reduction in agglomeration and the improvement
17 in electroplating of the parts.

18 The examiner cited -- actually, I think we cited to her this
19 reference Japanese patent, with 388 as the last three digits, and that's a fairly
20 general disclosure that talks about just a wide variety of different things that
21 can be used, in their opinion, for electroplating.

22 They seem to have very wide concentration ranges, with no
23 criticality as to any ratio between them.

1 We've looked through the application and tried to find out what
2 their real claim to fame is there, and we looked at the examples and we
3 looked at the preferred embodiments, and all of these seem to be going in a
4 different direction from what our method is claiming.

5 They're trying to achieve a more or less neutral solution,
6 because the thought in the industry is that if you're operating around a
7 neutral pH, you have the least effect on the component parts that you're
8 trying to plate.

9 Here, we've found that it should be acidic to a degree, within
10 the range of 3 1/2 to 5 1/2, because that --

11 JUDGE KIMLIN: Does the reference say, though, that a
12 preferred pH is in the range of 5 to 8?

13 MR. FANUCCI: 5 to 8, right, but in the examples shown, 6
14 and 7, 6 to 7 1/2, because they're looking at a neutral solution, and we've
15 tried to show that, when you're operating in a neutral condition, you don't get
16 a stable bath.

17 At least, we reproduced the reference to the best of our ability,
18 and we found cloudiness in the deposit.

19 I don't know if you had the ability to see the color photographs
20 that were submitted. I did give them to the examiner, but I have copied here
21 if you'd like to look at them. But it's a pretty dramatic change that the bath
22 becomes unstable the higher the pH goes, and below 5, it's a completely
23 clear solution.

1 JUDGE KIMLIN: Isn't this essentially the same bath, though,
2 that the reference disclosed?

3 MR. FANUCCI: Well, no, it's not. It's kind of a selection
4 improvement over it, because we're --

5 JUDGE KIMLIN: Well, what I'm saying is, in terms of
6 components --

7 MR. FANUCCI: Yes, and that's why --

8 JUDGE KIMLIN: -- wouldn't the reference recognize that, at
9 these pH's that you're talking about, there was cloudiness or whatever?

10 MR. FANUCCI: I have to say no, because they did all their
11 examples at pH's of 6 and 7, and they were very happy with the results.
12 They were saying how wonderful everything is.

13 JUDGE KIMLIN: But your argument is, at 6 and 7, it's no
14 good.

15 MR. FANUCCI: It's no good when we make it up. I don't
16 know how they made it up, but we reproduced it, and we weren't able to get
17 the same results.

18 Perhaps it could be a theoretical, you know, publication, we
19 don't know, but when it goes to the practicality of trying to make this stuff
20 and actually implement it, which is what our client does, we were not able
21 to -- to reproduce it, and I think it's -- and again, we recognize the fact that it
22 is a disclosure, and that's why we canceled the composition claims, because
23 we felt that our invention was a method invention of reducing

1 agglomeration. We wanted that to be a feature of the claim. We wanted the
2 pH and the concentration ratio to be in defined ranges, which we've stated
3 and which we have written to be outside of what the reference seems to
4 prefer, and we think that the combination of those factors is something that
5 gives us a patentable method claim, and you know, I wouldn't be here
6 arguing for a composition claim, because -- there's some commonality
7 between it, but it's a more difficult test, because composition doesn't have to
8 do anything special, all the results will be inherent, but we have is the actual
9 combination of ingredients that give you this result, and we've defined it by
10 a method claim.

11 JUDGE KIMLIN: The references are performing the same
12 method, as well.

13 MR. FANUCCI: They're not interested in -- there is no
14 mention of reduction of agglomeration. There's no mention of that --

15 JUDGE KIMLIN: But I mean in terms of plating.

16 MR. FANUCCI: They're plating, but plating on a steel
17 substrate or copper substrate is a big difference than trying to plate on
18 these -- these small electrical component parts that are composite substrates.

19 That's --

20 JUDGE KIMLIN: Your claim just calls for depositing it on a
21 substrate.

1 MR. FANUCCI: Well, if you look down at the bottom -- we
2 did define it at the end. We added it on as a -- it was a dependent claim that
3 was moved up. So, it appears in the -- in the last clause of the claim.

4 I think, again, your point is well taken. I think the examiner
5 initially made these rejections based on composition claims, and -- and to an
6 extent, we agreed with her, and we re-cast all the claims as methods, in an
7 effort to better recite what it is we do and what it is we're trying to get.

8 So, now it's not something that can just inherently happen. It's
9 something we teach how to get, whereas the reference is just silent on all of
10 these features.

11 Could somebody have put it together after lots of
12 experimentation with the reference? Probably. But that's not what the
13 teaching is to the skilled artisan, and again, when you try to repeat what
14 they're doing and you start with their preferred examples, you just can't get it
15 to work, and I think that's important to -- to show that they're really not
16 recognizing what it is, they're kind of trying to get to an ideal situation,
17 which everyone would love. Believe me, we don't have a pH at 3 if we
18 could work it at 7, but it doesn't work at 7.

19 So, I think that's the -- you know, it is -- it is a selection
20 invention, but I think we've tried to do our best to cast the claim in a way
21 that supports what we're trying -- the result we're to achieve and how to get
22 that result.

23 I just want to see if there's anything else.

1 Since I've got a couple more minutes, if you don't mind, you
2 can see that, at a pH of 7, you're getting all kinds of cloudy and turbid
3 precipitation, which shows the bath is unstable.

4 You still have some at 6, and you still -- just starting at 5 1/2,
5 but once you're 5 and below, which is our most preferred range --

6 JUDGE KIMLIN: I see a dramatic visual difference.

7 MR. FANUCCI: Yeah. You know, it's a problem trying to
8 submit these things, and I did send it to the examiner, to her e-mail, so that
9 she could print them out and look at them.

10 You're welcome to keep them in the file, if you'd like.

11 So, unless there's any other questions, I think I've tried to
12 explain what we did and why did it and why we think it's patentable.

13 JUDGE KIMLIN: Yes, we understand the issue, pretty clear,
14 like at a pH of -- what was it?

15 MR. FANUCCI: 3 1/2 to 5 1/2.

16 JUDGE KIMLIN: Yes.

17 MR. FANUCCI: You know, the examiner also said something
18 in -- in her brief that -- something like it's obvious, without unexpected
19 result. So, it actually went to the trouble of doing the test and submitting the
20 evidence to try to show what we're -- what we're saying is actually true, and
21 I think that that didn't seem to get acknowledged in her answer, so I'd like to
22 just emphasize that we did do the work and tried to show why this is a
23 patentable invention.

1 JUDGE KIMLIN: All right.

2 MR. FANUCCI: Thank you very much for your time.

3 JUDGE KIMLIN: Thank you for coming.

4 MR. FANUCCI: All right.

5 JUDGE KIMLIN: Do you need these back?

6 MR. FANUCCI: No, you can keep that file. I have extras on
7 the computer. Once they're on the computer, they're forever, you know.

8 JUDGE KIMLIN: Thannks for coming.

9 MR. FANUCCI: Thank you.

10 (Whereupon, the hearing was concluded.)